Furey, Eileen

From: Czerniak, George
Sent: Thursday, October 01, 2015 12:29 PM
To: Furey, Eileen; Tyson, MaryPat; Compher, Michael; Persoon, Carolyn
Subject: FW: Union Station materials

From: Kelley, Jeff
Sent: Thursday, October 01, 2015 11:50 AM
To: Hedman, Susan
Cc: Czerniak, George; Beckmann, Ronna Erin
Subject: Union Station materials

Susan, attached is the draft Union Station air monitoring report (we're revising the cover to make it more "official") and below is a statement and some Qs and As that will be added to the website. Once you give the go ahead, Ronna will schedule a briefing to share the results of the survey with stakeholders. After that briefing, we'll update the website and notify interested reporters.

Desk statement/website update

For three weeks during June and July 2015, EPA scientists used portable air monitors on publicly accessible train platforms at Chicago's Union Station to measure levels of fine particulate matter in the air during typical commuting times. For comparison, EPA took similar measurements at street level on the sidewalks around Union Station.

Particulate matter is the term for particles found in the air, including dust, dirt, soot, smoke and liquid droplets. Fine particles, less than 2.5 micrometers in diameter, can be suspended in the air for long periods of time; some can be dark enough to be seen as soot or smoke. They come from motor vehicles, power plants, locomotives, fireplaces – anything that burns fuel. In this case, diesel locomotives.

EPA found that fine particulate matter levels on Union Station platforms were consistently higher than at street level, with the highest pollution levels during rush hours. This is probably a result of increased locomotive traffic and insufficient ventilation.

The data EPA collected cannot be compared to EPA's National Ambient Air Quality Standards because the standards are based on longer-term exposures. So EPA has asked the Agency for Toxic Substances and Disease Registry and Centers for Disease Control and Prevention to use the data collected to find out if there is a health risk. If there is, EPA will pursue pollution reductions. [May change pending ATSDR's response]

Qs & As to be posted online

Q: Why did EPA monitor particulate matter at the train platforms at Union Station?

A: EPA's mission is to protect public health and the environment. A 2014 study by the Illinois Institute of Technology raised questions about the quality of air on Union Station platforms and identified possible high levels of fine particulate matter, known as PM 2.5, or soot. The data collected during June and July 2015 provides additional information about air quality on train platforms.

Q: What did EPA find during the monitoring survey?
A: EPA measured short-term concentrations of fine particulate matter on the underground platforms at Union Station near idling locomotives. We found levels on the platforms consistently higher than at street level, measurements taken on the sidewalk around Union Station. The hourly average was higher during rush hour periods, and the south platform had more instances of higher concentrations. The cause is probably locomotive emissions and insufficient ventilation. (insert link to the report document)

Q: What are EPA's next steps? [May change pending ATSDR's response]
A: EPA requested the Agency for Toxic Substances and Disease Registry at the Centers for Disease Control and Prevention to use the data we collected to find out if there is any health risk. www.atsdr.cdc.gov If there is any health risk, EPA will pursue pollution reductions through, for example, idle reduction, cleaner locomotives, or improved ventilation.

Q: What pollutants did you monitor?
A: We monitored short-term levels of PM2.5, likely from locomotive diesel emissions. EPA regulates fine particulate matter in outdoor air through National Ambient Air Quality Standards (NAAQS), and regulates diesel emissions through engine standards, both established under the Clean Air Act. The sensors used in this survey do not meet EPA's monitoring requirements for the NAAQS, but by using portable sensors rather than regulatory stationary monitors, EPA researchers moved around platforms and collected data closer to locomotives.

Q: What is PM2.5? What are the health effects?
A: Particulate matter is the term for particles found in the air, including dust, dirt, soot, smoke and liquid droplets. Fine particles, less than 2.5 micrometers in diameter, can be suspended in the air for long periods of time; some can be dark enough to be seen as soot or smoke. They come from motor vehicles, power plants, locomotives, fireplaces – anything that burns fuel. In this case, diesel locomotives.

PM2.5 particles may pose the greatest health risk. When we inhale, the tiny particles can get deep into our lungs and respiratory system. www.airnow.gov/index.cfm?action=aqibasics.particle

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